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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION N
09/534,262	03/24/2000	Kanji Hata	2000-0351	2898

7590 10/06/2004

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EXAMINER

CHANG, RICK KILTAE

ART UNIT

PAPER NUMBER

3729

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/534,262	HATA ET AL.	
	Examiner	Art Unit	
	Rick K. Chang	3729	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 04 May 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 15-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 15-25 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All
 - b) Some *
 - c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/4/04 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 15-17 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker et al (US 5,743,001) in view of Asai et al (US 5,711,065), and further in view of Browne (US 4,231,153).

Baker discloses a pair of component supply stations with reels (cassettes are attached at the end of reel), first and second mounting head sections, mounting heads are independently movable in X- and Y-directions to pick-up components from their respective tables, and substantially all the claimed limitations.

Baker fails to disclose providing first and second supply tables with casters positioned opposite from each other and replacing the tables with desired components therein.

Asai discloses providing a table with casters and replacing the tables with desired components therein (Fig. 2).

Browne discloses that first and second supply tables are positioned opposite from each other (29, 32 and 34 are positioned opposed from each other).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Baker by providing a table with casters and replacing the tables with desired components therein to the Baker's mounting device, as taught by Asai, for the purpose of allowing the component table to reload with different types of components at a component reloading station and speeding up the mounting process.

Further, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Baker by positioning first and second supply tables opposite from each other, as taught by Browne, for the purpose of increasing mounting speed.

4. Claims 18 and 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker et al (US 5,743,001) in view of Asai et al (US 5,711,065), and further in view of Nakao et al (US 5,743,005) and Browne (US 4,231,153).

Baker discloses a pair of component supply tables with reels (cassettes are attached at the end of reel), a pair of U-shaped support frames and base structure, first and second mounting head sections, mounting heads are independently movable in X- and Y-directions to pick-up components from their respective tables, the take-out positions are extending straight line, and substantially all the claimed limitations (see Figures).

Bake fails to disclose providing each of the tables with casters positioned opposite from each other and replacing the tables with desired components therein, and extending the board transfer path through openings in the U-shaped support frames.

Asai discloses providing a table with casters and replacing the tables with desired components therein (Fig. 2).

Nakao discloses extending the board transfer path through openings in the U-shaped support frames (Fig. 6) thereby allowing the mounting heads to travel shorter distances to mount components for decreasing production time.

Browne discloses that first and second supply tables are positioned opposite from each other (29, 32 and 34 are positioned opposed from each other).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Baker by providing a table with casters and replacing the tables with desired components therein to the Baker's mounting device, as taught by Asai, for the purpose of allowing the component table to reload with different types of components at a component reloading station and speeding up the mounting process.

Further, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Baker by extending the board transfer path through openings in the U-shaped support frames to the Baker's mounting device, as taught by Nakao, for the purpose of allowing the mounting heads to travel shorter distances to mount components for decreasing production time.

Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Baker by positioning first and second supply tables opposite from each other, as taught by Browne, for the purpose of increasing mounting speed.

Response to Arguments

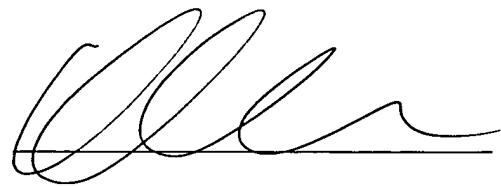
5. Applicant's arguments with respect to claims 15-25 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Please provide reference numerals (either in parentheses next to the claimed limitation or in a table format with one column listing the claimed limitation and another column listing corresponding reference numerals in the remark section of the response to the Office Action) to all the claimed limitations as well as support in the disclosure for better clarity (optional). Applicants are duly reminded that a full and proper response to this Office Action that includes any amendment to the claims and specification of the application as originally filed requires that the applicant point out the support for any amendment made to the disclosure, including the claims. See 37 CFR 1.111 and MPEP 2163.06.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick K. Chang whose telephone number is (703) 308-4784. The examiner can normally be reached on 5:30 AM to 1:30 PM, Monday through Thursday.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9303 for After Final communications.

A handwritten signature in black ink, appearing to read "RC", is written over a horizontal line.

RICHARD CHANG
PRIMARY EXAMINER

RC
October 4, 2004